



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

C45-3-8B-PO
Job Sheet 177364



Part No: C45-3-8B-PO

Job Qty: 40 ea

Part Name: Actuator Shaft Bushing



Part Weight: 0 lbs

Status: Scheduled

Priority: High

Job Created: 5/10/18

Job Tracking No:

Due Date: 6/8/18

Created By: Patrick Lussier

Type: Stock

Description:

Note: DWG C45-3-8B Rev. 4 IPP Rev. A 18.05.09 new issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	40 pcs	6/8/18	6/8/18	0.00	0.00	Purchasing		At 19/05/18
110	Packaging	40 pcs	6/8/18	6/8/18	0.00	0.00	Packaging2		At 19/05/18
120	QC	40 pcs	6/8/18	6/8/18	0.00	0.00	QC6		38
130	Packaging	40 pcs	6/8/18	6/8/18	0.00	0.00	Packaging3		GA-Alain 18-05-30
140	QC21-FG	40 Ea	6/8/18	6/8/18	0.00	0.00	QC21		DAS MAY 30 2018

Part Op 100 - Issue P/O: 039860 MANUFACTURE C45-3-8B AS PER DWG Supplier: METEC Certificate of conformity is
Descriptions: required

10 New 2018 x 40 AL

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
C45-3-8BP	Actuator Shaft Bushing Solenoid Side	40 pcs (1 ea)	100-Purchasing	5075395

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	C45-3-8BP	40	2	0

Part Specifications

Specifications could not be found.

Plex 5/10/18 8:52 AM dart.Lussier.Patrick



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 813 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S075396



Part: C45-3-8B

Job No: 177364

Serial No/Batch: S075396

Revision: 4

Inspector:

Date: 05/29/18

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DE
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Dart Aerospace Ltd.
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Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

C45-3-8B
Job Sheet 175721



Part No: C45-3-8B

Job Qty: 20 ea

Part Name: Actuator Shaft Bushing



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 4/10/18

Job Tracking No:

Due Date: 4/20/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG C45-3-8B REV 4 IPP REV A 18.02.14 NEW ISSUE FK VERIFY DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	20 Ea		4/19/18	0.00	0.00	Start Up Machining-4		
120	Mori Seiki	20 pcs		4/20/18	0.50	3.33	MORI SL-154		
130	QC	20 pcs		4/20/18	0.00	0.00	QC2 Machining-5		
140	QC	20 pcs		4/20/18	0.00	0.00	QC8 Machining-5		
150	Packaging	20 pcs		4/20/18	0.00	0.00	Packaging3-2		
160	QC21-SA	20 Ea		4/20/18	0.00	0.00	QC21		

Part Op 120 - 1-Machine as per folio FE 048 FOLIO REV: _____ DWG REV: _____ 2-Debur
Descriptions: 150 - Identify and Stock

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-BRONZE-C63000-R1.000	Bronze C63000 Round Bar 1.000"	.8800 ft (.044 ea)	90-Start up Operation	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	MT-BRONZE-C63000-R1.000	1	3	0

Part Specifications

Specifications could not be found.

Plex 4/10/18 12:50 PM Dart.lajeunesse.marie

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

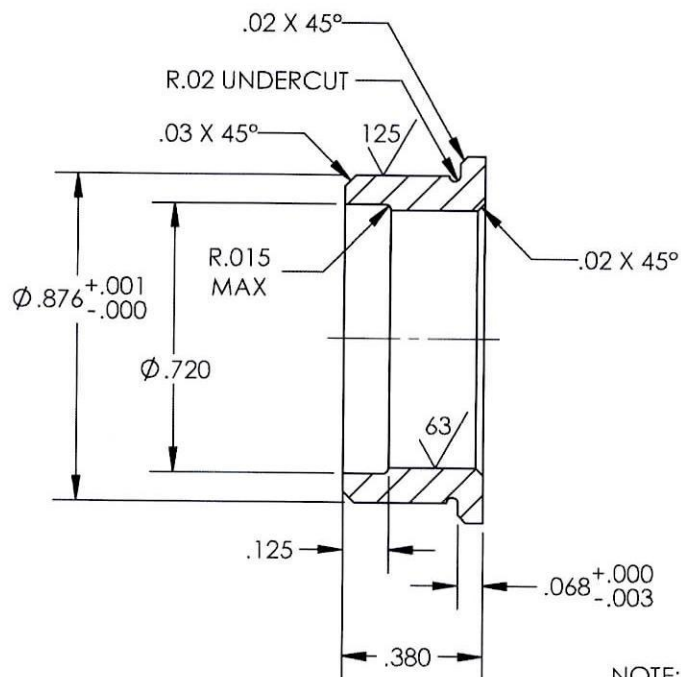
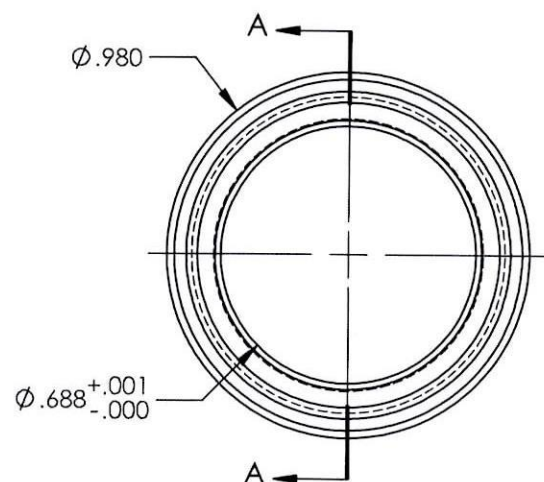
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval _____		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause				FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimension ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3		AS DRAWN BY CANAM.	9/11/2012		
3A	14-0127	CH'D TITLE BLOCK WAS RED BARN IS DART. ADDED BAG & LABEL NOTE. CH'D TOLERANCE ON NON-CRITICAL DIMENSIONS.	8/13/2014	DPD	RW
4	17-0049	UPDATED TO NEW DRAFTING STANDARD. ADDED DIM R.015 MAX.	2/15/2017	RJC	SM



SECTION A-A

NOTE:
BAG & LABEL WITH BATCH NUMBER.

DART AEROSPACE	
TITLE ACTUATOR SHAFT BUSHING SOLENOID SIDE	
DWG NO. C45-3-8B	REV 4
MAT'L AL BRONZE 630 HEAT TREAT FINISH SPEC DRAWN BY: CANAM CHECKED: DUERFELDT OPSS APPR: ANDERSON QA APPR: LINDSAY APPROVED: MACKOVJAK	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125/✓ 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL	
SCALE 2:1	DATE 4/12/2002
SHEET 1 OF 1	

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS
			C45-3-8B	1	ACTUATOR SHAFT BUSHING SOLENOID SIDE	AL BRONZE 630	(MCMaster-CARR #8203K612) MODIFIED

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation				Disposition			
				Completed By			
				Lead hand / Supervisor Approval Verification			
				QC / QA Coordinator Approval			
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
OTHER : _____							



Dart Aerospace Ltd.
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Canada

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PURCHASE ORDER **PO039860**

Supplier: MEM001-VC
Metec Metal Technology Inc.
20 Terry Fox Drive PO Box 781
Vankleek Hill
ON
K0B 1R0 Canada
Phone: 613 678 3957
Fax: 613 678 3956

Attention: Walz, Shigi

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO039860
PO Date: 5/10/18
Due Date: 6/8/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Lussier, PatrickPhone:

Via: Ground
Pynt Terms: Net 60
Freight Terms:
Special Comments:

Items

Line Item	Part	Supplier Part No	Item No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	C3-4-1P			Load Beam Bushing	Firmed	6/8/18	50 pcs	0 pcs ✓ 50x	50 pcs	\$0.01/pcs	\$0.50 At 19/05/19
Line Item Note W/O 177361											
2	C3-8-2-2P			Solenoid Drilling Jig C3 Hook	Firmed	6/8/18	30 pcs	0 pcs	30 pcs	\$0.01/pcs	\$0.30
Line Item Note W/O 177362											
3	C3-12-2P			Lock Shaft	Firmed	6/8/18	30 pcs	0 pcs	30 pcs	\$0.01/pcs	\$0.30
Line Item Note W/O 177363											
4	C45-3-8BP			Actuator Shaft Bushing Solenoid Side	Firmed	6/8/18	40 pcs	0 pcs ✓ 40x	40 pcs	\$0.01/pcs	\$0.40 At 18/05/19
Line Item Note W/O 177364											
5	C45-3-8AP			Actuator Shaft Bushing	Firmed	6/8/18	40 pcs	0 pcs ✓ 40x	40 pcs	\$0.01/pcs	\$0.40 At 18/05/19
Line Item Note W/O 177367											
6	C45-4-1P			Trunnion Bushing	Firmed	6/8/18	50 pcs	0 pcs ✓ 50x	50 pcs	\$0.01/pcs	\$0.50 At 19/05/19
Line Item Note W/O 177369											
7	C10-23-1P			Keeper Spacer	Firmed	6/8/18	50 pcs	0 pcs	50 pcs	\$0.01/pcs	\$0.50
Line Item Note W/O 177373											
8	RBW6305G01232-3G-5P			Spacer	Firmed	6/8/18	25 Ea	0 Ea	25 Ea	\$0.01/Ea	\$0.25
Line Item Note W/O 177396											

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20 Terry Fox Drive, Vankleek Hill, Ontario K0B 1R0

Tel. (613) 678-3957 & (613) 678-2782 Fax (613) 678-3956 metec@metec.ca

CERTIFICATE OF CONFORMITY

SOLD TO:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ont.
K6A 1K7

SHIPPED TO:

same

Quantity	Part Number	Part Name	P.O. Number
50	DART C3-4-1P	Load Beam Bushing	39860
32	DART C3-8-2-2P	Solenoid Drilling Jig C3 Hook	39860
40	DART C45-3-8BP	Actuator Shaft Bushing Solenoid Side	39860
40	DART C45-3-8AP	Actuator Shaft Bushing	39860
50	DART C45-4-1P	Trunnion Bushing	39860

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MATERIAL: supplied by METEC

We hereby certify that the above parts were made in conformance with applicable drawings.

METEC Metal Technology Inc.

Heather Nixon

Vankleek Hill, May 25, 2018